

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/001571

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H03H-17/00, H03H-17/08, H03H-15/00

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base, and, where practicable, search terms used)

Databases Searched: Delphion; Pluspat; Inspec; IEEE Xplore; CPD; USPTO Full-Text DB; Google

Keywords Used: finite impulse response/fir; feed forward equalizer/decision feedback equalizer/ffe/dfe;
 serializer/deserializer/SerDes; operating frequency; reduced/low/optimised/clock/frequency/power; latch; half-
 speed latch; dual-edge; double-edge even & odd; rising & falling; column; multiplexer/multiplier/mux/mul;

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,367,476 (Elliott) 22 Nov. 1994 (22-11-1994) **Abstract and Figure 1**	1-2
P,X	JP 2004128858 A (Maeda Yasuhisa) 22 Apr. 2004 (22-04-2004) **Abstract and Representative figure**	1-3, 12-13
A	US 2002/0152250 A1 (Staszewski) 17 Oct. 2002 (17-10-2002) **Entire document **	1-13
O,A	Badalone, R., Carleton University Seminar on "Challenges and Future of ultra high-speed system interconnections", 08 Aug. 2004 (08-08-2004) accessed from: http://www.doe.carleton.ca/cgi-bin/Zope.cgi/DOE-Seminar/1098290985/index_html on Nov. 5, 2004.	
P,A	Iniewski, K., et al, "SERDES Technology for Gigabit I/O Communications in Storage Area Networking", 4 th IEEE International Workshop System-on-Chip for Real-Time Applications, IWSOC 2004, Banff, Alberta, July 19-21, 2004. **Entire document**	12-13
(SEE CONTINUATION OF SECOND SHEET)		

Patent family members are listed in annex.

* Special categories of cited documents :	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance		
"E" earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international-type search
05 November 2004 (05-11-2004)Date of mailing of the international-type search report
26 November 2004 (26-11-2004)

Name and mailing address of the ISA/
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 4023609 A (Tachibana Takashi) 28 Jan. 1992 (28-01-1992) **Abstract and Representative figure**	1-13
A	EP 1 168 615 A1 (Kiriaki) 02 Jan. 2002 (02-01-2002) **Abstract, Fig. 1, paragraphs [0003]-[0015] & [0041]**	1-13

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CA2004/001571

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
US5367476	22-11-1994	US5367476 A	22-11-1994
JP2004128858	22-04-2004	JP2004128858 A	22-04-2004
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